UNIVERSITY OF QUEENSLAND

Prentice Computer Centre

NEWSLETTER

authorization: Director of the Centre

1 SYSTEM RELIABILITY

Well, system reliability has not been good and I thought you would like to know some further details of the problems that we have had.

On the night of 14 November, there was a severe and unusual power surge as a result of lightning. This powered off our airconditioning and was more than our over-voltage controls within the computing equipment could manage. The computer system went down with faults in a number of areas but, primarily, in the disk controllers and a 64K bank of memory.

Although the obvious faults were cleared that night and we went back into operation the next morning, there still remained a number of intermittent faults in the equipment. These continued to plague us and all users until on the 23rd and 24th November and again on the 30th November, I decided to keep the system down for extended periods to carry out more thorough investigations. In these periods, we found two defective power supplies and four faulty electronic boards in the system.

You will recall that, in an earlier newsletter, I mentioned that our maintenance effort and expertise was less than it should be during the absence of two of our senior engineers in the USA undertaking a training course on the new equipment which will be delivered in December. We were very grateful, therefore, that it was possible for Jim Sokoll (our Senior Engineer for 10 years but now in private practice) to assist us with our investigations.

Another point I should bring up is the question of load. The system has been effectively saturated since 1976 and we have more demand than the supply of computing resource. This situation was predicted but the limitation of capital funding in 1976 has meant